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ABSTRACT

A study was done to determine the feasibility of using the culture assimilator (a programmed learning experience) as a race-relations training technique for junior grade officers. The assimilator is intended to help individuals of one culture better understand the point of view of individuals of another culture. Assimilator items focus on "critical incidents" or situations likely to result in cross-cultural misunderstanding. The incidents in this case were based on taped interviews of black and white officers and enlisted personnel from several Army installations. Four responses with feedback were prepared for each of 100 problems. Field tests were done with eighty-four white junior grade officers and eighty-five black junior grade officers. Results indicated (1) the assimilator's sample problems represented events more familiar to black officers than to white officers; (2) blacks obtained higher scores on the assimilator than whites; (3) evidence of learning by white officers as a function of assimilator training was obtained; (4) evidence was obtained that attitudes and knowledge changed as a function of training; and (5) the face validity of the results was compromised somewhat by uncontrolled testing factors, such as subject fatigue. (Author/CSS)

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Technical Paper 310

USE OF A BLACK "CULTURE ASSIMILATOR" TO INCREASE RACIAL UNDERSTANDING

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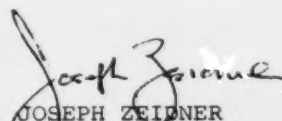
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(b) blacks obtain higher scores on the assimilator (indicative of greater knowledge of the black perspective on race relations in the Army) than whites; (c) significant evidence of learning of acculturative materials on the part of white officers was obtained; and (d) there was significant improvement on an independent test of intercultural understanding.

FOREWORD

Since 1972, the Army Research Institute has been active in research on the policy, operational problems, and programs of the Army's Race Relations/Equal Opportunity (RR/EO) program. One of the objectives of the Army RR/EO Research Program in FY 73 was the development of alternative modes of RR/EO training to supplement the existing program. This technical paper, the first of two, describes the research involved in determining the feasibility of applying a programmed learning approach to race-relations training. The purpose of this approach, the culture assimilator, was to improve majority group junior officer awareness and understanding of the lifestyles, social norms, and behavior manifestations of black enlisted personnel. The research was conducted under Army Project 2Q162108A743, "Race Harmony Promotion Programs," in the FY 73 Work Program as an in-house effort augmented by a contract with University City Science Center under contract DAHC 19-72-C-0039.


JOSEPH ZEIDNER
Technical Director

USE OF A BLACK "CULTURE ASSIMILATOR" TO INCREASE RACIAL UNDERSTANDING

BRIEF

Requirement:

To determine the feasibility of using the culture assimilator (a programed learning experience) as a race-relations training technique.

Procedure:

The specific approach involved the development of a culture assimilator aimed at junior grade officers. A culture assimilator is designed to provide information aimed at helping individuals of one cultural (or subcultural) background to understand better the point of view (subjective culture) of individuals of another cultural (or subcultural) background. The particular items of an assimilator focus on "critical incidents" involving situations particularly likely to result in cross-cultural misunderstanding. The critical incidents that provided the basis for assimilator items were based on extensive taped interviews of black and white officers and enlisted personnel collected at several Army installations. Most of the items developed in the pilot assimilator dealt with the cultural background and perspective of black enlisted men. Critical incidents were converted into problem situations depicting black-white interactions. Four responses with feedback were prepared for each problem, with one showing more insight into the black culture. A 100-item assimilator was field tested at four Army installations.

Findings:

In general, the results of the field test of the pilot assimilator indicated that (a) the sample of problems used in the assimilator represented a set of events far more familiar to black officers than to white officers; (b) blacks obtained higher scores on the assimilator than whites; (c) evidence of learning on the part of the white officers as a function of assimilator training was obtained; and (d) evidence, though not strong, was obtained that both attitudes and knowledge changed as a function of the training.

Utilization of Findings:

These results demonstrated that the assimilator is a potentially useful technique for application in the U.S. Army race-relations training program. However, the assimilator requires revision and validation to insure that it fulfills Army race-relations training objectives.

USE OF A BLACK "CULTURE ASSIMILATOR" TO INCREASE RACIAL UNDERSTANDING

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USE OF A BLACK "CULTURE ASSIMILATOR" TO INCREASE RACIAL UNDERSTANDING

INTRODUCTION

Where relations between minority and majority groups are concerned, it takes little documentation to show that America is a less than perfect society. Whatever the causes of the problems (and there have been many articulate and perceptive analyses, e.g., Allport, 1954; Rokeach, 1960; Loya, 1971; Myrdal, 1962), systematic attempts at providing solutions have been vigorous since the middle 1940's (Lewin, 1948). While the programs for the reduction of prejudicial attitudes and behavior toward minority groups (blacks and Jews) have tended to be variations of the small group process models first enunciated by Lewin, they also tended to be cut off from a good research and evaluation base. This development was contrary to the prescription of Lewin (1948) calling for "comparative studies of social change."

Curiously, when programs for cross-cultural skills have not been focused on American ethnic/racial problems, they have been more open to the necessity of rigorous research designs and the development of action programs based on empirical data--a rather intriguing example being Lambert's work on language learning in Canada (Lambert, Ignatow, & Kranthamer, 1968; Lambert, Gardner, Barik, & Tunstall, 1963). With a body of research becoming increasingly available, it would seem logical to apply some of these findings to the problem of changing racial attitudes in American society.

The U.S. military is probably a reflection of the total society, because it includes representatives of every social and racial group. As such, its problems of prejudice may mirror the problems in our society as a whole. Because it is also a hierarchically organized structure, the military may be similar in many ways to other social structures (government, industry, etc.). For these reasons, the results of race-relations programs in a military context may have considerable generality.

It is not our intent to examine or evaluate current military race-relations programs because summaries of these are available elsewhere (Nordlie, Friedman, & Marbury, 1972; Day, Landis, & McGrew, 1975). Our purpose here is to describe the development and initial evaluation of a new technique for increasing racial understanding in the Army context. The uniqueness of the approach used here may be understood by contrasting it with current techniques of training.

Underlying much of the current training is the assumption that it is not only important for members of one cultural group to learn about the norms and lifestyles of another, but that it can be critical to "unlearn" misperceptions about another culture. For example, much traditional training is focused on giving white personnel an understanding of the history and cultural characteristics of American blacks. There are, of course, several ways that one can present such information: books (e.g., Liebow, 1967), lectures by race-relations trainers, films, sensitivity training, videotapes of simulated black/white encounters, and visits to urban ghettos. Although each of these techniques has something to recommend it, there is a lack of comparative data on effectiveness, and these methods tend to be unstructured. They also usually do not directly address anything like the "unlearning" mentioned above nor do they focus on alternative behavior patterns that can be appropriately reinforced. This leads to a certain inefficiency in the use of the instructor's and the trainee's time.

A need to improve race relations in the military setting and the dissatisfaction with current approaches to the problem led to the present project. It was decided to try to develop a "culture assimilator" that would have the following characteristics: (a) it would be focused on black/white interactions in the Army setting; (b) it would be developed for use with junior-grade officers; and (c) it would deal specifically with the interactions between white officers and black enlisted men. The present study, part of a larger research effort (Landis, Day, McGrew, & Miller, 1973a), describes the development and results of a field test of the U.S. Army culture assimilator (Landis & Miller, 1973b).

A culture assimilator is a training technique designed to reduce the conflicts, tensions, and misunderstandings that frequently result from encounters between individuals from different cultural backgrounds. This is accomplished by exposing the trainee to culturally relevant information presented in such a way that he becomes sensitized to subtle cues important in social interaction with representatives of another culture. The information is presented in the form of a large number of short episodes that briefly describe interpersonal situations often encountered in cross-cultural contexts, along with alternative explanations for the events presented. The individual chooses one explanation and is immediately given feedback on whether his choice is correct, an explanation of the events in the episode, and an underlying principle to help him understand the other culture. He then proceeds to the next episode (Mitchell, Dossett, Fiedler, & Triandis, 1971). The technique incorporates the theoretical principles of Triandis's (1972) approach to subjective culture and Skinner's (1961) approach to programed learning.

To construct a valid and effective culture assimilator it is necessary first to identify culturally critical concepts and behaviors. These concepts and behaviors are incorporated as episodes in an assimilator to provide the trainee with intercultural experiences to cope with symbolically. Episodes must depict areas of culture contrast that have the largest impact on social behavior with the culture being studied. This selection process must be empirically valid so that an episode--a "critical incident" (Flanagan, 1954)--finally included in the assimilator is relevant, common to the intercultural encounter, open to misinterpretation by the untrained, yet clear for those with sufficient cultural knowledge (Fiedler, Mitchell, & Triandis, 1971).

Critical incidents are gathered from individuals who have had experience with the culture under study, as well as from members of the host culture who have had experiences with individuals from the trainee's culture. These individuals are asked to "describe some specific intercultural occurrences or events that made a major difference in their attitudes or behavior toward the member of the other culture. These may be pleasant, unpleasant, or simply non-understandable occurrences" (Fiedler et al., 1971). These incidents, with alternatives and explanations added, are presented for validation to a large number of individuals from the culture being studied; they analyze the incident, its importance, and the correctness of the interpretation given (Mitchell & Foa, 1968). The assimilator includes only those incidents that have the highest agreement among the members of the culture under study with respect to the above requirements.

A number of culture assimilators have been independently constructed for the cross-cultural training of Americans for interaction in countries in the Far East, the Middle East, Europe, and Central America. Numerous laboratory and field studies have been conducted to validate these culture assimilators as training instruments (Mitchell et al., 1971). Although these studies varied greatly in geographic location of the target culture, subject demographics, control group training, and types and extensiveness of measurement, the results consistently suggested that for assimilator-trained individuals, interpersonal interactions with members of another culture are enhanced. The fact that this seems to occur across very different circumstances and situations lends support to the notion that the phenomenon is a general one and that this method is widely applicable. Less clear were the results relating to effective task performance; yet, in the single instance (the Honduras assimilator) in which the culture assimilator was designed specifically to include task-oriented situations (O'Brien, Fiedler, & Hewitt, 1971), significant improvement in performance was found. This suggests that better results in both improved task performance and interpersonal relations might be expected in culture assimilators that are constructed with special attention placed on including items specific to the work setting the trainee is

likely to experience.¹ This information may be particularly relevant for an Army assimilator, because Army leadership by necessity must often concentrate on effective task performance.

All of the prior assimilators dealt with cultures outside the United States. Recent interest has focused on the feasibility of developing similar techniques for interaction between American subgroups. Triandis and his associates (Slobodin, 1972) developed a black/white assimilator focused on the work setting. A laboratory assessment of the Slobodin assimilator revealed significant shifts, as a function of assimilator training, in behavioral intentions and knowledge of black culture (Weldon, Carlston, Rissman, Slobodin, & Triandis, 1975).

Although these results are encouraging, the mechanism is obscure by which acculturative knowledge is obtained in an assimilator training situation.

Several other questions bear inspection. First, the assumption underlying the assimilator is that the information being provided would be more familiar to members of the target culture than to others, i.e., blacks would be expected to score higher than whites on the Slobodin. Curiously, this hypothesis has never been directly tested. Second, if the assimilator is effective, the test culture would be expected initially to score low and gradually approach the criterion set by the target culture. Again, this hypothesis has not been directly tested. Finally, members of the test culture would be expected to do better on external measures as a function of learning level on the assimilator. The present paper was designed to explore these three hypotheses.

METHOD AND PROCEDURE

Development of the Assimilator

Of critical importance in any use of the assimilator technique is that the situations reflect actual events that blacks and whites have experienced. In the present project, such incidents were obtained by the use of the critical incident technique (Flanagan, 1954). Interviews were carried out with black and white enlisted men and officers in groups of no more than five men, homogeneous in race and rank. The race of the interviewer was the same as that of the group. The enlisted men were stationed at a base in the Northeast, and the officers were from a Southeastern base. The enlisted-men sample consisted of 90 whites and 90 blacks; the officer sample involved 63 whites and 63 blacks. Each interview was tape-recorded for later analysis and extraction of suitable critical incidents for the assimilator.

¹ In two validation studies (Chemers, Fiedler, Lekhyana, & Stolurow, 1966; Chemers, 1969) the amount of learning was measured. In both cases learning was significant for assimilator-trained subjects.

Six steps were taken to prepare the assimilator items from the tapes. First, the tapes were examined and indexed for themes. Second, an analysis of the themes was made and incidents selected. Third, transcripts of the selected incidents were edited to form a coherent story line. Fourth, a question was added to each incident, and plausible, but not obvious, options were devised, including one which reflected knowledge of black culture, lifestyles, or history. (To some extent it was possible to extract the options from the interviews.) Fifth, for each option, a rationale was prepared, with the "correct" option's rationale providing an explanation in terms of black culture. Finally, each complete item was reviewed by a mixed-race group drawn from our own staff.

For the Army field test, 100 items were prepared, 75 selected from the interviews ("Army" items) and 25 from the Slobodin set ("civilian" items). A sample item, with options and rationales, follows.

The white CO of a racially integrated unit tried to recommend promotions on the basis of his men's work and proficiency scores. After the list of promotions was posted, a black Spec 4 entered his office and asked why he had not been promoted. The Spec 4 claimed that he had fairly good scores and asked the CO to review his decision. The CO was surprised at this behavior, but promised to give some attention to the complaint. Upon reflection, the CO noted that promotion reviews were requested much more frequently by blacks in his unit than by whites. The CO was puzzled and surprised by this realization.

Why did more blacks than whites request reviews of promotion decision?

Option 1. Blacks feel they won't be given a promotion unless they ask for one. (Yes)

Rationale: Many blacks feel that a good mark record alone is not sufficient for a promotion. They feel that unless they call attention to their case, it will not be acted upon. This action is not to be taken as disrespectful, but rather as an action which is assumed to be necessary for promotion.

Option 2. The CO was prejudiced and promoted more whites than blacks. (No)

Rationale: There is no evidence to support this. Reread the incident and select another response.

Option 3. Blacks are troublemakers more often than whites are. (No)

Rationale: There is nothing in the incident to suggest that the blacks were troublemakers. Try again.

Option 4. Many blacks hope to get promotions they don't deserve by intimidating their CO's and getting them to give in to avoid being called "prejudiced."
(No)

Rationale: The blacks' behavior was not intimidating. There were no threats or insinuations. You're reading too much into this incident. Reread the incident and try again.

The items were grouped into five volumes of 15 Army and 5 civilian items each. Placement of an item was random within its volume, as was the position of the "correct" option within an item. Each volume of the assimilator included a section giving the rationale for the technique and instructions for recording responses.

Test of the Assimilator

The present study was designed not only to develop a particular assimilator, but to provide data on several problems. First, no data in the literature specify "native" responses (those of the target culture) to assimilator items. This information is crucial if the assimilator is to train nonnatives to understand and appreciate the target culture. Second, no available data relate to the shape of the learning function of the acculturative materials. The learning curve is important, because the peak point will determine the optimum number of assimilator items necessary to produce learning. Third, little attention has been given to assessing cognitive changes as a function of assimilator training, data that could help determine the eventual usefulness of the assimilator technique.

Four bases, (two in the Southeast, two in the Southwest) having a sufficient population of black junior-grade officers, served as sites for the field test. Each base was asked to make available at least 25 black and 25 white officers; approximately 15% of each group either did not report to the training room or were dropped from the data pool because their data were unusable.

To control for possible order effects in the five volumes of the assimilators, 10 unique counterbalanced sequences were established and randomly and independently assigned to trainees within each base. Approximately five subjects per base had each sequence.

Each subject, in addition to responding to the item options in terms of correctness, rated each option as to its "adequacy" and each incident in terms of its "familiarity." Subjects were also given the Weldon et al. (1975) Test of Intercultural Sensitivity (TICS) both before and after the training. TICS items are similar in format to the assimilator except that the rationales and feedback aspects are eliminated.

RESULTS

This section will present the results of three analyses of the data. In the first we consider the question of whether the items are differentially familiar to black versus white officers. The second analysis is concerned with differential learning patterns as a function of increasing experience with acculturative materials. The third investigates the effect of assimilator training on the TICS measures.

Familiarity

Because the predominant focus of the assimilator was on black culture, we would expect that the familiarity ratings by the black officers should be significantly higher than those of the white officers if we were successful in sampling relevant interracial problems.

Consistency over a set of items in the direction of the difference between racial groups on familiarity rankings was examined separately by volume within base and by volume across bases, using Wilcoxon signed-rank test. Over all items and bases, blacks rated items as more familiar than did whites at highly significant levels ($p < .01$ or better). In addition, items in each of the five volumes were rated significantly more familiar for blacks at all four bases.

This analysis clearly suggests that the situations captured in the assimilator probably have been experienced by many black officers and are at least perceived by them to represent familiar problems. Conversely, the white officers are comparatively unfamiliar with these problems.

Differential Learning

A weighted score per item was computed for an individual in the following way: If he selected the correct answer on the first trial, he received 10 points; a correct answer on the second trial, 6; on the third, 2; and on the fourth, 1. This method gives considerable weight to the ability to select the correct answer with little or no delay.

Performance in terms of weighted scores should increase as the subject works through the five volumes of the assimilator if the training is effective. Because this was an exploratory study, we made no a priori assumptions about the form of the volume position curve, i.e., about the shape of the learning function. Inspection of the means showed that some of the items were quite easy. These items, because there could be little improvement on them, would tend to cloud what learning might be present; therefore, prior to further analysis, the items for each volume were dichotomized at the median into "easy" and "difficult" items for each race group. This division was based on the means from each volume for those subjects who received it first (Position 1) in one of the 10 counterbalanced sequences, so that the division of items would be based on first exposure responses with minimal prior learning.

The overall effect of volume position on performance was examined by combining the data for all five volumes at each position. These data are presented in Figure 1 with separate curves for blacks and whites and a split on difficulty level for both samples. Because data from volumes presented first were used for the split on difficulty, interpretation of the data and significance tests legitimately should be confined to contrasts among positions ranging between Position 2 and Position 5. The first observation based on Figure 1 is that the less difficult items generally do not discriminate between black and white officers, whereas the more difficult items clearly do. This is supported by t tests of the differences in mean scores (Table 1). Differences between blacks and whites at each of the five volume positions were significant ($p < .01$ or better) on the high-difficulty items, while only one of these comparisons was significant on the low-difficulty items (and that a reversal favoring whites). The high-difficulty items thus do represent a set that meets the minimum validity criterion of discriminating in favor of blacks.

Training Effects

For performance (learning) trends (Figure 1), the black officers show a relatively stable and level performance with little or no overall change between Positions 2 and 5 both on the low- and the high-difficulty items. These results are consistent with the notion that because black officers presumably already understand the black view, there is no reason to expect much, if any, increase in performance.

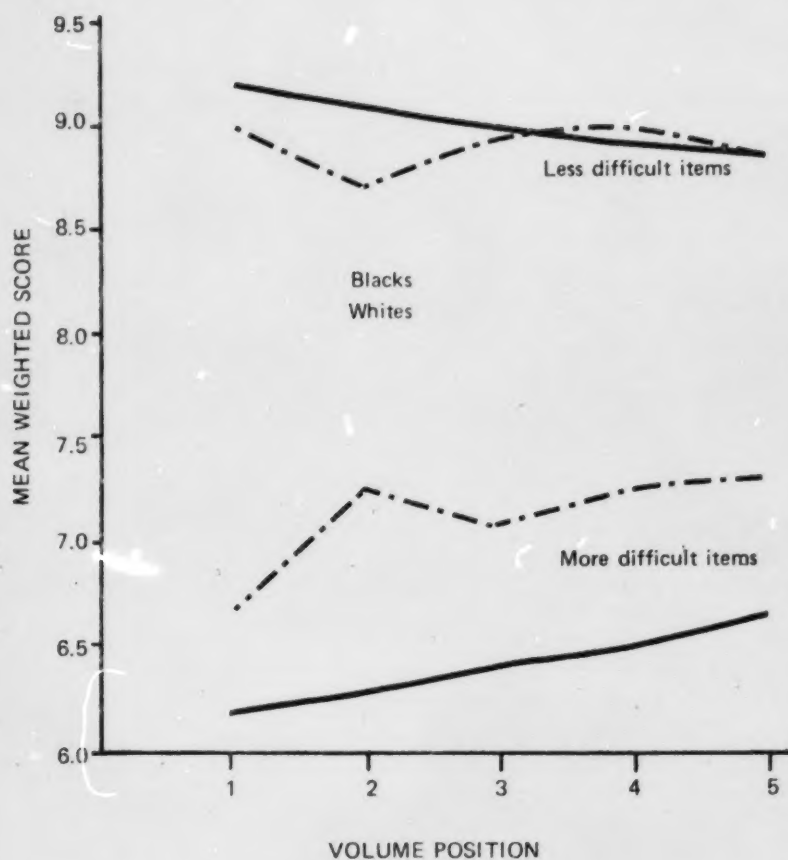


Figure 1. Learning curves across five volume positions contrasting item difficulty and black versus white subjects.

Table 1

Differences in Mean Scores for Black Officers Compared
with White Officers: t Values

Volume position	High-difficulty item	Low-difficulty item	All items
1	2.59*	-1.21	1.29
2	5.40**	-2.63*	2.16*
3	3.23**	-0.11	2.47*
4	3.78**	0.64	2.95**
5	3.37**	0.06	2.29*

Note. A positive t value indicates blacks scored higher than whites.

*p < .05.

**p < .01.

On the more difficult items, the white officers show a clear steady linear trend with significant improvement by Position 5 ($p < .05$). This suggests that the white officers were steadily learning as they worked through the five volumes.

Gain scores (Volume 1 minus Volume 5) were computed for each subject and subjects were then dichotomized at the median as high- or low-gain learners. The data for the sum of the 10 TICS items were examined by analysis of variance with race of subject, learning level, and pre- and postassimilator training as factors. There were two notable effects: race ($F = 4.80$, $df = 1/76$, $p < .05$ and race x achievement x pre-post ($F = 3.29$, $df = 1/76$, $p < .10$).

For our purposes, the effect of interest is the three-way interaction. This effect, which approaches significance at the .05 level, shows definite improvement in weighted scores for three out of the four groups. The largest improvement occurs with the HI-white group of subjects and is significant ($p < .05$). The other changes are not significant.

The actual size of the three-way interaction should be viewed as a conservative estimate of the effect. This conclusion is made tenable by noting that 5 out of the 10 items showed significant pre-post effects ($p < .05$), and each of these effects was in the same direction as the overall analyses. The remaining nondiscriminating items would act to suppress the apparent size of the change pre- to postadministration.

DISCUSSION

The results of the current project are encouraging. They are even more satisfying when one considers that a number of factors worked against success. The time was relatively brief and the pace was hurried. There could be relatively little sample control. Some of the subjects were or had reason to be hostile about participating (e.g., they were ordered to participate), although the Army officers tended to be professional and diligent about their performance. The 4-hour-long sessions turned out to be something of a test of endurance and were not representative of the way an assimilator ultimately should be used. A substantial number of items that proved to be very easy (maybe only because options were too obvious) possibly further contributed to subject fatigue, obscured overall black/white discrimination, probably reduced assimilator reliability to some extent, were distractors or annoyers, and worked against "face validity." Finally, the black officers had a middle-class background and nearly all had at least some college training, which made them more similar to white officers than were the black enlisted men referred to in many items of the assimilator. This may have reduced the contrasts between the black and white officers.

There were compensating factors. The general concern of both black and white officers about race relations issues meant that most of the subjects were quite serious about their performance--many (blacks as well as whites) expressed appreciation for insights gained. The other major pluses were a basically rigorous methodological design and a mixed-race research team. The latter had the advantages of both insider and knowledgeable outsider perspectives on the black point of view. This is in line with what Campbell (1964) described as methodologically imperative in cross-cultural research to avoid pitfalls in either limited perspective alone.

The data supportive of generalizability across situations (i.e., TICS) tend to reduce the need for complete face validity in the acculturative materials. If this finding holds under cross-validation, it may not be necessary to develop unique assimilators focused on particular situations--e.g., Army, Navy, employment, education, etc.

The strong effect of the more difficult items in contrast to the easy items suggests that an assimilator based on difficult items (without the fatiguing and distracting effects of easy ones) will yield a more powerful training instrument with fewer volumes. Such an instrument might be desirable, but brevity is not ultimately as salient a factor as it may have been in the field test. A more potent instrument (comprised of more difficult items) of the same or greater length should function more powerfully if appropriately administered over multiple sittings at the subject's own pace. This is one of the advantages that would accrue to an operational assimilator. Others include (a) accommodation of individual differences, i.e., the learning would proceed at a

subject-determined rate; (b) learning in a setting that does not tend to provoke or exacerbate racial tension, as rap sessions often do; (c) learning during off-duty hours; (d) an easily operationalized technique, e.g., put in field manual form; and (e) besides improving white understanding of blacks, it seems to give more empathetic and realistic perspective to white behavior toward blacks, e.g., that white discrimination is often based on misinformation, defensiveness, or inexperience rather than hostile racism.

There are other cautions that should be mentioned. A complete evaluation would assess the effect of assimilator training on interracial interaction. The limited aims of the current project made such a test impossible. However, there is reason to believe that under certain conditions such interaction would be improved. In the Weldon et al. (1975) study, trained and untrained white subjects interacted with black confederates. Blind ratings made by the confederate indicated a superior attraction for the trained versus the untrained subjects. This result, however, was obtained only after a relatively long time between training and interaction had elapsed. The reverse effect was found when the subjects went directly from the training to the interaction setting. Landis (cited in Weldon et al., 1975) suggested the following explanation for these results:

If an interpersonal interaction occurs prior to consolidation [of new culture knowledge], and if that interaction is anxiety producing, then the trained subject may fall back upon old responses with a new tenacity. However, if the interaction is pleasant and long enough to be productive and supportive of the new attributions, then the new patterns become fully integrated. (p. 309)

The Weldon et al. results and Landis's comment suggest the conditions under which assimilator training would result in positive interpersonal interactions. Thus although it is clear that the assimilator is an effective method for transmitting cultural knowledge, the translation of that information into behavior may depend heavily on the nature of subsequent interactions. The interaction between assimilator training and later behavior (particularly the issue of temporal sequencing) should form the basis of a rigorous study. Such a study should include a linking of behavioral attributions, stereotyping, and interpersonal attitudes. Unknown as yet is which of these changes are most important in changing interpersonal behavior. Indeed, it is not clear what type of assimilator can be said to be a useful device for the reduction of prejudicial behavior.

Should such a study be performed and show positive results, then its use in a military context would move the Army one step further toward achieving President Truman's 1948 order: "It is hereby declared to be the policy of the President that there shall be equality for all persons in the armed services without regard to race, color, religion, or national origin."

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